### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Reid W. von Borstel Atty. Ref.: 1331-337

Serial No. Unassigned Group:

Filed: April 20, 2001 Examiner:

For: COMPOSITIONS AND METHODS FOR TREATMENT OF MITOCHONDRIAL

**DISEASES** 

April 20, 2001

Assistant Commissioner for Patents Washington, DC 20231

Sir:

### PRELIMINARY AMENDMENT

Please amend this application as follows:

# IN THE CLAIMS

Please cancel Claims 19, 43 and 44 without prejudice.

Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

1 (Amended). A method for treating or preventing pathophysiological consequences of mitochondrial respiratory chain dysfunction in a mammal comprising administering to said mammal in need of such treatment or prevention an effective amount of a pyrimidine nucleotide precursor, thereby treating or preventing said consequences; wherein said effective amount is from 0.05 to 0.3 grams of said precursor per kilogram body weight per day.

32 (Amended). A method for preventing death or functional decline of post-mitotic cells in a mammal due to mitochondrial respiratory chain dysfunction comprising administration of an effective amount of a pyrimidine nucleotide precursor, thereby preventing said death or functional decline; wherein said effective amount is from 0.05 to 0.3 grams of said precursor per kilogram body weight per day.

36 (Amended). A method for treating developmental delay in cognitive, motor, language, executive function, or social skills in a mammal comprising administration of an effective amount of a pyrimidine nucleotide precursor, thereby treating said developmental delay; wherein said effective amount is from 0.05 to 0.3 grams of said precursor per kilogram body weight per day.

41. A method for reducing side effects of cytotoxic cancer chemotherapy agents by administering a pyrimidine nucleotide precursor, where said cytotoxic

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chemotherapy agent is not a pyrimidine nucleoside analog, thereby reducing said side-effects; wherein said effective amount is from 0.05 to 0.3 grams of said precursor per kilogram body weight per day.

#### **REMARKS**

Claims 1-18 and 20-42, 45 and 46 are presented. Claim 44 together with further dependent claims have been allowed in parent application Serial No. 09/144,096 filed August 31, 1998, of which the present application is a continuation application.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "Version With Markings To Show Changes Made."

Action on the present application is awaited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.** 

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# **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

#### IN THE CLAIMS

1 (Amended). A method for treating or preventing pathophysiological consequences of mitochondrial respiratory chain dysfunction in a mammal comprising administering to said mammal in need of such treatment or prevention an effective amount of a pyrimidine nucleotide precursor, thereby treating or preventing said consequences; wherein said effective amount is from 0.05 to 0.3 grams of said precursor per kilogram body weight per day.

32 (Amended). A method for preventing death or functional decline of post-mitotic cells in a mammal due to mitochondrial respiratory chain dysfunction comprising administration of an effective amount of a pyrimidine nucleotide precursor, thereby preventing said death or functional decline; wherein said effective amount is from 0.05 to 0.3 grams of said precursor per kilogram body weight per day.

36 (Amended). A method for treating developmental delay in cognitive, motor, language, executive function, or social skills in a mammal comprising administration of an effective amount of a pyrimidine nucleotide precursor.

thereby treating said developmental delay; wherein said effective amount is from 0.05 to 0.3 grams of said precursor per kilogram body weight per day.

41 (Amended). A method for reducing side effects of cytotoxic cancer chemotherapy agents by administering a pyrimidine nucleotide precursor, where said cytotoxic chemotherapy agent is not a pyrimidine nucleoside analog, thereby reducing said side-effects; wherein said effective amount is from 0.05 to 0.3 grams of said precursor per kilogram body weight per day.